

REUTERS/Mariana Bazo

## LEVERAGED LOAN MONTHLY

#### THOMSON REUTERS LPC

#### **MARCH 2016**

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## **LEVERAGED LOAN MONTHLY**

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## **KEY POINTS**

- •Leveraged loan issuance is off to a slow start this year, amounting to \$112 billion in 1Q16, the lowest quarterly figure since 4Q11. First quarter volume was down 29% from 4Q15 and 20% from 1Q15 levels. Nearly two thirds of leveraged loan deal flow in 1Q16 was pro rata.
- •Institutional loan issuance fell to \$39 billion in 1Q16, down from \$51 billion in the prior quarter and \$45 billion in the same quarter a year ago. Given market conditions, refinancing volume for institutional loans was extremely limited in the first quarter, with new money activity making up 93% of issuance.
- •The top industry in terms of issuance in 1Q16 was Technology followed by Retail.
- •M&A leveraged loan volume dropped to \$54 billion in the first quarter (though it was boosted by some deals that launched in 2015 but were completed in 2016), with LBO activity accounting for \$17 billion of this total.
- •High-yield bond issuance increased to \$18.8 billion in March, but first quarter volume at \$33.5 billion is still down 62% from the corresponding quarter last year.
- •Sports Authority Inc., Town Sports International Holdings Inc., Aspect Software Inc., and Southcross Holdings LP defaulted in March with institutional loan debt amounting to \$1.35 billion. Year to date there has been \$5.75 billion of institutional loan defaults.



## **KEY POINTS**

- •After jumping in January and February due to increased market volatility, new issue yields tightened in March to 6.1% for large corporate credits and 7.4% for middle market loans. On an overall quarter basis, large corporate loan yields widened to 6.2% from 5.8%, while middle market credits widened to 7.3% from 7.1%.
- •Loan bids have rebounded since mid-February, with U.S. multi-quote institutional term loans ending March at 92.29, up 180 bps from the February low but still down 80 bps this year. The flow name SMi100 finished the month at 97.28, up nearly 200 bps from the February low.
- •European flow names rebounded by roughly 175 bps in March to an average of 98.87.
- •U.S. CLO issuance increased in March to \$5.3 billion (13 deals), up from \$2.1 billion in February and \$826 million in January. This brought 1Q16 issuance to \$8.2 billion (20 deals), down sharply from \$29.8 billion (55 deals) in the same period last year.
- •European CLO issuance picked up in March, with five deals pricing for a total of €1.82 billion. Overall 1Q16 issuance was €2.64 billion, down from €3.3 billion in the same quarter last year.
- •U.S. CLOs AUM increased to \$428 billion in March, while European CLOs AUM edged higher to €65 billion.



## **KEY POINTS**

- •As secondary market prices have rebounded in recent weeks, the share of loan assets in U.S. CLOs bid above 98 has increased to 58% for US CLOs and 71% for European CLOs. The share of sub-90 credits has declined to 14% for U.S. deals. The corresponding number for loans in European CLOs is 9%.
- •Based on the most recent data available, loan funds turned marginally positive in March, pulling in \$169 million. Still, year to date outflows are at \$5.9 billion. HY bond funds posted a second straight month of strong inflows, adding \$5.1 billion in March following an inflow of \$7.2 billion in February. Year to date, HY bond funds have pulled in \$7.9 billion.
- •Loan mutual fund & ETF assets under management increased for the first time since May 2015, growing 3% in March and ending the month around \$110.7 billion. The increase in AUM was mainly driven by an increase in asset values as secondary market loan prices rebounded in March.
- •Open-end loan funds bounced back in March, returning 2.67%, while the S&P/LSTA index was up 2.76%. Year to date, open-end loan funds have gained 1.34%, with the index up 1.55%. Individual open-end fund YTD returns range from -2.50% to 2.75%.





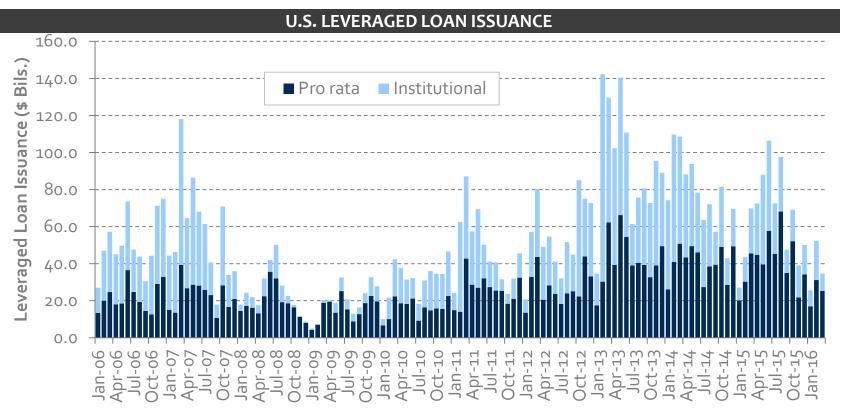
REUTERS/Petar Kujundzic

## LEVERAGED LOAN MARKET OVERVIEW

\*2016 loan volumes are based on the most recently available data and is subject to updates throughout the quarter.



# LEVERAGED LOAN ISSUANCE: PRO RATA VS. INSTITUTIONAL



- Leveraged loan issuance is off to a slow start this year, amounting to \$112 billion in 1Q16, the lowest quarterly figure since 4Q11.
- The 1Q16 volume was down 29% from 4Q15 and 20% from 1Q15 levels.
- Nearly two thirds of leveraged loan deal flow in 1Q16 was pro rata.



## 1Q 2016 LEVERAGED LOAN ISSUANCE BY INDUSTRY

Industry	Lev. Vol. (\$Bils.)	% of Lev. Vol
Technology	24.75	22.0%
Retail & Supermarkets	13.33	11.9%
Beverage, Food, and Tobacco Processing	11.50	10.2%
General Manufacturing	8.78	7.8%
Healthcare	8.68	7.7%
Oil and Gas	5.70	5.1%
Wholesale	5.63	5.0%
Financial Services	4.71	4.2%
Services	3.95	3.5%
Automotive	3.31	2.9%
n/a	3.15	2.8%
Utilities	2.97	2.6%
Chemicals, Plastics & Rubber	2.92	2.6%
Business Services	2.26	2.0%
REITS	1.92	1.7%
Construction	1.67	1.5%
Leisure and Entertainment	1.25	1.1%
Hotel & Gaming	1.06	0.9%
Restaurants	1.05	0.9%
Media	1.04	0.9%
Paper & Packaging	0.86	0.8%
Transportation	0.70	0.6%
Shipping	0.40	0.4%
Telecommunications	0.29	0.3%
Textiles and Apparel	0.27	0.2%
Agriculture	0.19	0.2%
Aerospace and Defense	0.07	0.1%
Mining	0.01	0.01%

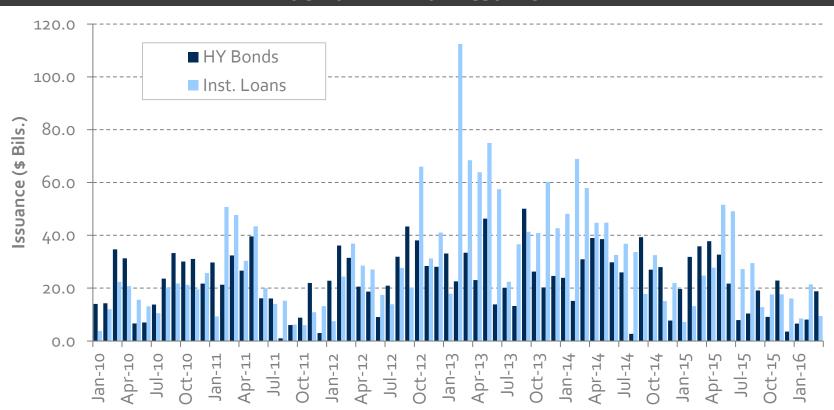
## 1Q 2016 INSTITUTIONAL LOAN ISSUANCE BY INDUSTRY

Industry	Inst. Vol. (\$Bils.)	% of Inst. Vol
Technology	15.79	40.1%
Retail & Supermarkets	6.32	16.0%
Healthcare	3.59	9.1%
Beverage, Food, and Tobacco Processing	2.77	7.0%
Automotive	2.32	5.9%
Chemicals, Plastics & Rubber	1.68	4.3%
General Manufacturing	1.53	3.9%
n/a	1.31	3.3%
Financial Services	0.78	2.0%
Services	0.76	1.9%
Media	0.69	1.8%
Business Services	0.32	0.8%
Hotel & Gaming	0.31	0.8%
Construction	0.30	0.8%
Paper & Packaging	0.30	0.8%
Leisure and Entertainment	0.24	0.6%
Agriculture	0.19	0.5%
Shipping	0.10	0.3%
Transportation	0.08	0.2%
Aerospace and Defense	0.04	0.1%
Wholesale	0.00	0.01%



### **U.S.** INSTITUTIONAL LOAN AND HY BOND ISSUANCE



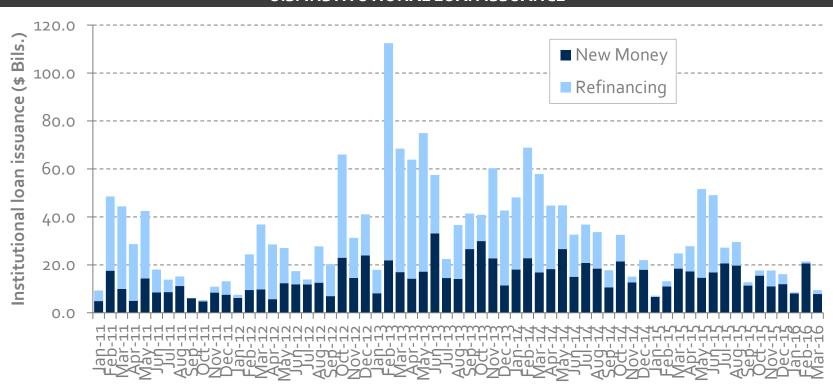


- Institutional loan issuance fell to \$39 billion in 1Q16, down from \$51 billion in the prior quarter and \$45 billion in the same quarter a year ago.
- High-yield bond issuance increased to \$18.8 billion in March, but 1Q16 volume at \$33.5 billion is still down 62% from the corresponding quarter last year.



## U.S. INSTITUTIONAL ISSUANCE: New Money vs. Refinancing

#### U.S. INSTITUTIONAL LOAN ISSUANCE

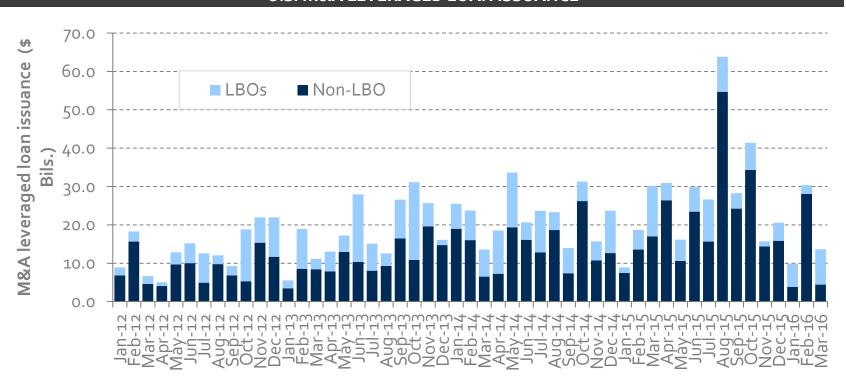


 Given market conditions, refinancing volume for institutional loans was extremely limited in the first quarter, with new money activity making up 93% of issuance.



## **M&A** LEVERAGED LOAN ISSUANCE

#### U.S. M&A LEVERAGED LOAN ISSUANCE

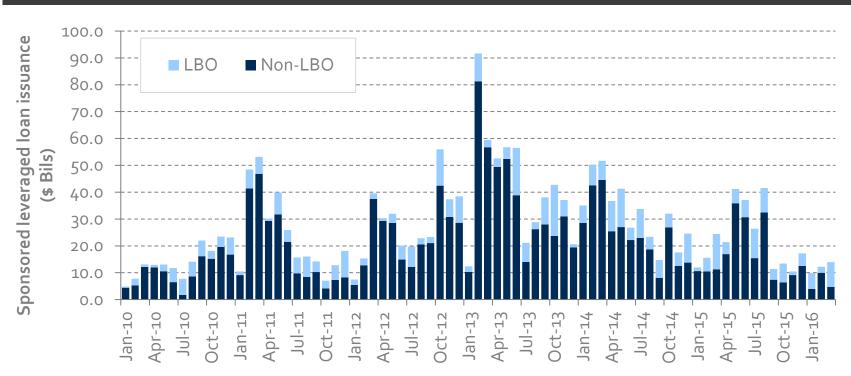


• M&A leveraged loan volume dropped to \$54 billion in 1Q16, (though it was boosted by some deals that launched in 2015 but were completed in 2016) with LBO activity accounting for \$17 billion of this total.



# SPONSORED LEVERAGED LOAN ISSUANCE: LBO VS. NON-LBO

#### SPONSORED LOAN ISSUANCE: LBO VS. NON-LBO

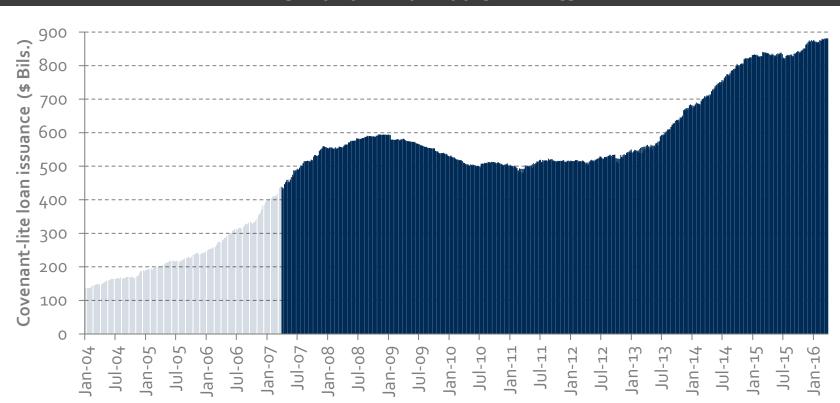


 Overall sponsored leveraged loan volume declined to \$36 billion in 1Q16, with just under half (48%) comprised of LBO activity.



### **INSTITUTIONAL LOAN OUTSTANDINGS**

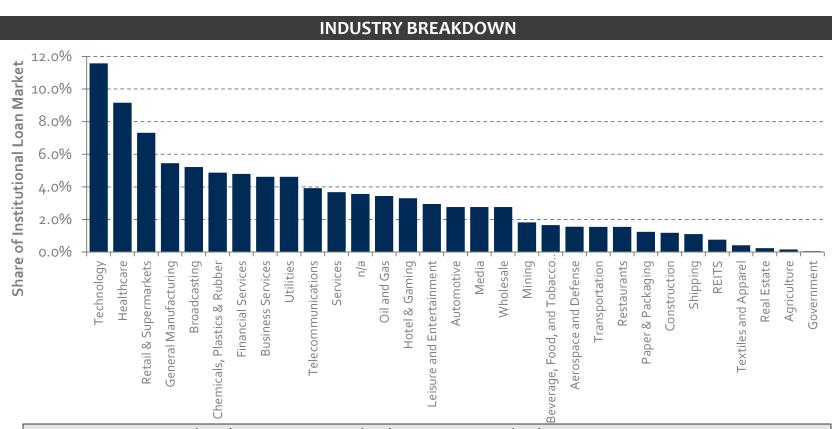
#### INSTITUTIONAL LOAN OUTSTANDINGS



• Institutional loan market outstandings have edged higher this year and are now at \$881 billion, up 1%.



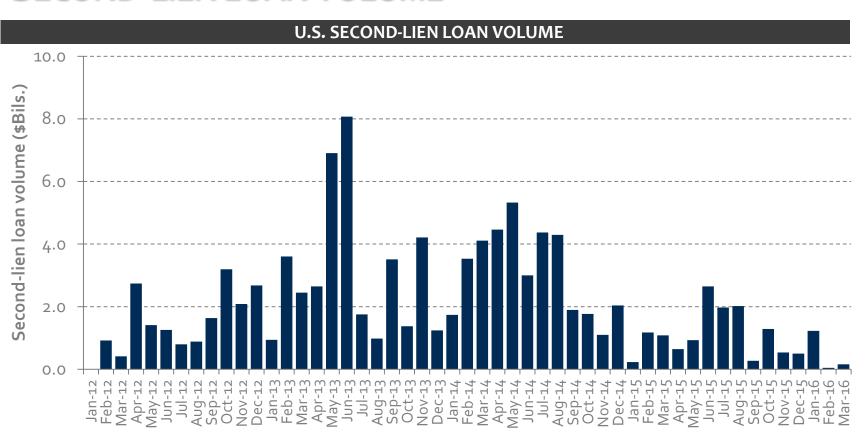
# INDUSTRY BREAKDOWN OF INSTITUTIONAL LOAN OUTSTANDINGS



- Technology (12%), Healthcare (9%), and Retail (7%) are the biggest sectors in the institutional loan market.
- The top 5 sectors account for 39% of outstanding institutional debt, while the top 10 sectors account for 62%.



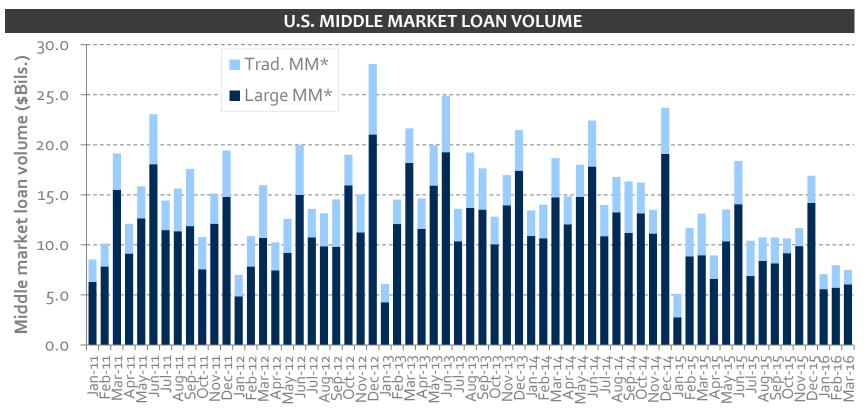
## **SECOND-LIEN LOAN VOLUME**



• Second-lien issuance was limited in 1Q16, amounting to only \$1.4 billion, the lowest level since 1Q12, as the market was in a risk-off mode for much of the quarter.



## **MIDDLE MARKET LOAN ISSUANCE**



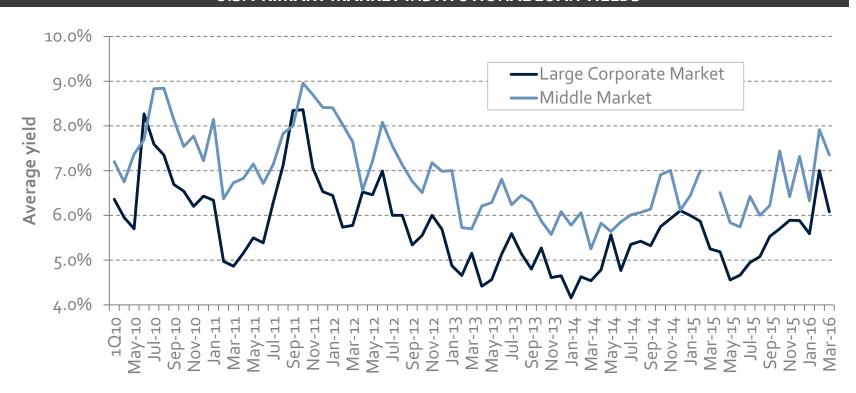
\*Traditional MM: Deal Size <=\$100M, Large MM: Deal Size >\$100M to \$500M, For all: Borrower Sales <\$500M

- Middle market lending fell sharply in 1Q16, down 43% from 4Q15 and 25% from 1Q15 activity.
- Middle market volume was \$22.6 billion, comprised of \$17.3 billion of large middle market issuance and \$5.2 billion in traditional MM volume.



## **PRIMARY MARKET YIELDS**

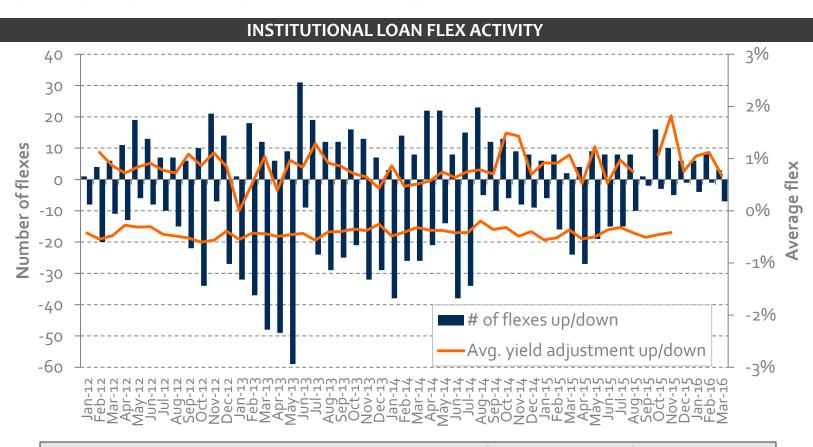
#### U.S. PRIMARY MARKET INSTITUTIONAL LOAN YIELDS



- After jumping in January and February due to increased market volatility, new issue yields tightened in March to 6.1% for large corporate credits and 7.4% for middle market loans.
- On an overall quarter basis, large corporate loan yields widened to 6.2% from 5.8%, while middle market credits widened to 7.3% from 7.1%.



### **INSTITUTIONAL LOAN FLEX ACTIVITY**



- As market sentiment improved in the latter part of 1Q16, downward flexes started to outnumber upward flexes again.
- Still, for the quarter as a whole, upward flexes outpaced downward flexes by a ratio of 1.4:1.



## INSTITUTIONAL LEVERAGED LOAN DEFAULTS ON TTM BASIS

			Default		
Month	Issuer	Par Value (\$ Mil.)		Default Source	Industry
April 2015	EveryWare Global Inc.	248.6		Chapter 11 Filing	Consumer Products
	Subtotal	248.6			
May 2015	Patriot Coal Corp.	250.0	05/12/15	Chapter 11 Filing	Metals & Mining
	Sabine Oil and Gas Corp.	700.0	05/21/15	Missed Payment	Energy
	Subtotal	950.0			
June 2015	Boomerang Tube LLC	214.0	06/09/15	Chapter 11 Filing	Metals & Mining
	Edmentum Inc.	140.0	06/10/15	Distressed Exchange	Computers & Electronics
	Subtotal	354.0			
July 2015	Walter Energy Inc.	978.2	07/15/15	Chapter 11 Filing	Metals & Mining
5diy 2010	Core Entertainment Inc.	160.0	07/15/15	Missed Payment	Broadcasting & Media
	Subtotal	1,138.2			
August 2015	Alpha Natural Resources Inc.	610.9	08/03/15	Chapter 11 Filing	Metals & Mining
1 14 94 01 20 10	American Seafoods Group LLC	281.5	08/20/15	Distressed Exchange	_
	Wilton Holdings Inc.	283.4	08/24/15		Services & Miscellaneous
	NYDJ Apparel LLC	50.0	08/25/15	Distressed Exchange	
	Univita Health Inc.	200.0	08/28/15	Chapter 7 Filing	Healthcare & Pharmaceuticals
	Subtotal	1,425.8			
September 2015	Samson Resources Co.	1,000.0	09/16/15	Chapter 11 Filing	Energy
2010	Subtotal	1,000.0			
October 2015	Miller Energy Resources Inc.	175.0	10/01/15	Chapter 11 Filing	Energy
OCIODEI 2013	Elo Touch Solutions Inc.	15.0	10/01/15	Distressed Exchange	Computers & Electronics
	MMM Holdings Inc.	352.0	10/30/15	Missed Payment	Healthcare & Pharmaceuticals
	Subtotal	542.0	10/30/13	iviiosou i ayinont	Troutinoure & Frianniaoeuticais

Source: Fitch U.S. Leveraged Loan Default Index.



### INSTITUTIONAL LEVERAGED LOAN DEFAULTS ON TTM BASIS

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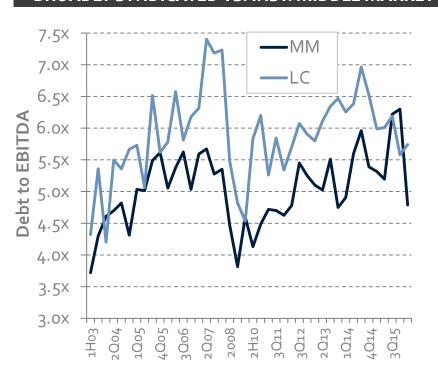
	1				T
			Default		
Month	Issuer	Par Value (\$ Mil.)	Date	Default Source	Industry
	Essar Steel Algoma Inc	375.0	11/09/15	Chapter 15 Filing	Metals & Mining
	Millennium Health LLC	1,775.0	11/10/15	Chapter 11 Filing	Healthcare & Pharmaceuticals
	Subtotal	2,150.0			
December 2015	Vantage Drilling Co.	664.8	12/03/15	Chapter 11 Filing	Energy
	Energy & Exploration Partners Inc.	765.3	12/07/15	Chapter 11 Filing	Energy
	Magnum Hunter Resources Corp.	336.6	12/15/15	Chapter 11 Filing	Energy
	Subtotal	1,766.7			
January 2016	Arch Coal Inc.	1,879.3	01/11/16	Chapter 11 Filing	Metals & Mining
	NewPage Corp.	731.3	01/26/16	Chapter 11 Filing	Paper & Containers
	RCS Capital Corp.	674.7	01/31/16	Chapter 11 Filing	Banking & Finance
	Subtotal	3,285.2			
February 2016	Noranda Aluminum Holding Corp.	467.3	02/08/16	Chapter 11 Filing	Metals & Mining
	Paragon Offshore	641.9	02/14/16	Chapter 11 Filing	Energy
	Subtotal	1,109.2			
	Sports Authority Inc.	300.0	03/02/16	Chapter 11 Filing	Retail
	Town Sports International Holdings	1			
	Inc.	29.8	03/07/16		Leisure & Entertainment
	Aspect Software Inc.	447.3	03/09/16	Chapter 11 Filing	Computers & Electronics
	Southcross Holdings LP	575.0	03/28/16	Chapter 11 Filing	Energy
	Subtotal	1,352.1			

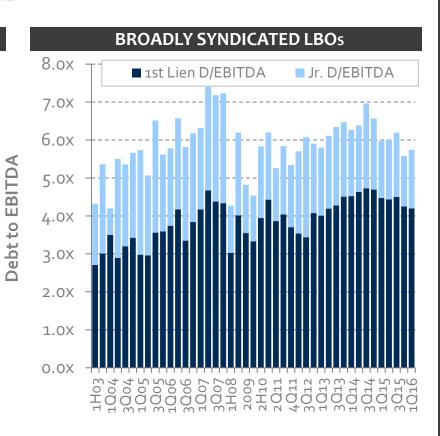
Source: Fitch U.S. Leveraged Loan Default Index.



## LBO DEBT TO EBITDA LEVELS

#### BROADLY SYNDICATED VS. INST. MIDDLE MARKET





 Average debt to EBITDA levels ticked higher in 1Q16 to 5.74 times for broadly syndicated LBO transactions, but fell sharply for institutional middle market LBOs on limited deal flow.



# LBO PURCHASE PRICE MULTIPLES: BROADLY SYNDICATED VS. INSTITUTIONAL MIDDLE MARKET

#### **BROADLY SYNDICATED VS. INST. MIDDLE MARKET**

#### **BROADLY SYNDICATED LBOs**



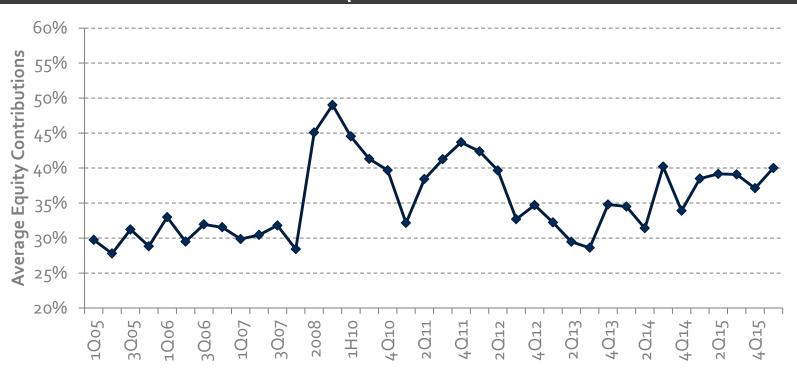


- Average purchase price multiples increased to 10.1 times in 1Q16 (from 9.9 times in full year 2015) for broadly syndicated LBOs.
- The average purchase price for deals tracked also jumped sharply.



# LBO EQUITY CONTRIBUTIONS: BROADLY SYNDICATED

#### **LBO EQUITY CONTRIBUTIONS**

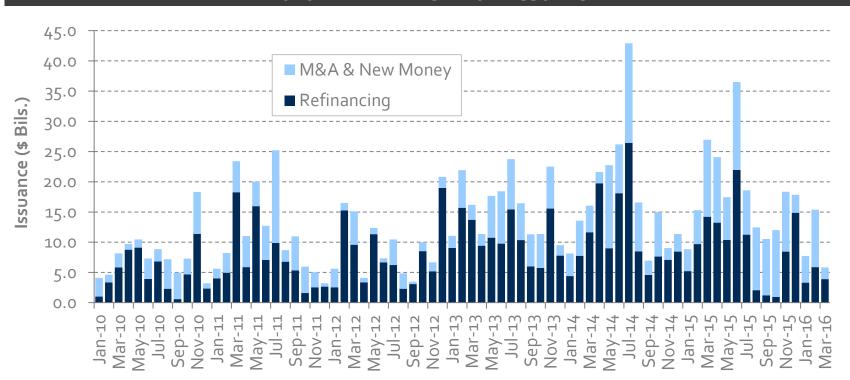


The average equity contribution increased to 40% in 1Q16 from 37% in 4Q15 for broadly syndicated LBOs.



### **EUROPEAN LEVERAGED LOAN ISSUANCE**

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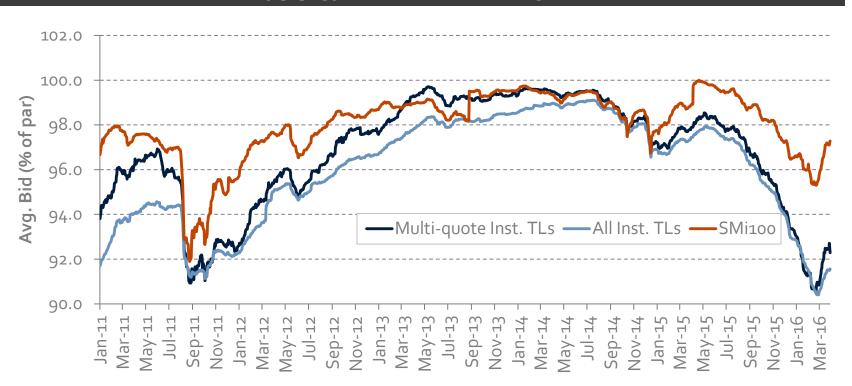


 European leveraged loan issuance totaled \$29 billion in 1Q16, with M&A and new money volume representing 55% of deal flow.



## **U.S.** SECONDARY MARKET BID LEVELS

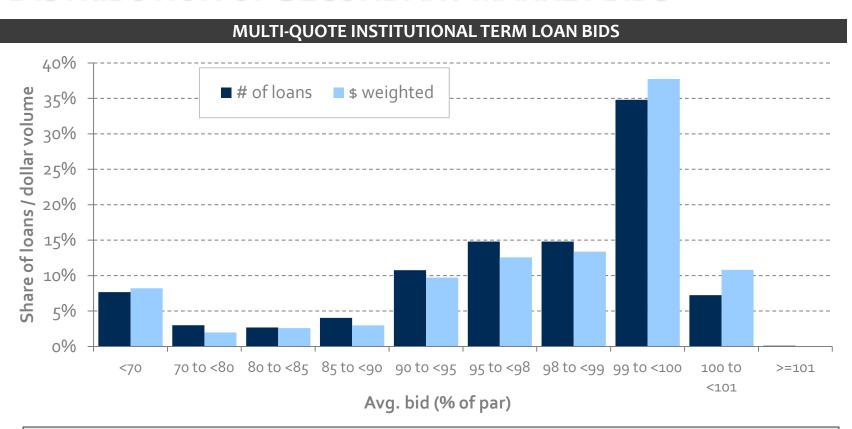
#### **U.S. SECONDARY MARKET AVERAGE BID**



- Loan bids have rebounded since mid-February, with multi-quote institutional term loans ending March at 92.29, up 180 bps from the February low but still down 80 bps this year.
- The flow name SMi100 finished the month at 97.28, up nearly 200 bps from the February low.



## **DISTRIBUTION OF SECONDARY MARKET BIDS**

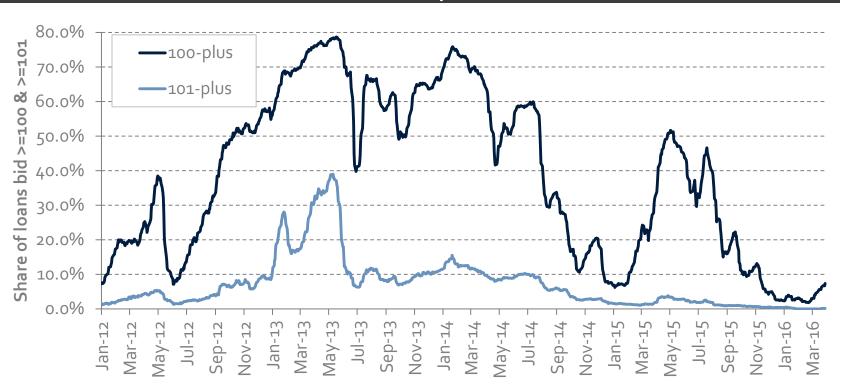


As of month-end March, 57% of loans (62% dollar weighted) are priced at 98 or above, while 17% of credits (16% dollar weighted) are bid below 90.



## PAR-PLUS & 101-PLUS MARKET SHARE

#### U.S. 100-PLUS & 101-PLUS SHARE: MULTI-QUOTE INSTITUTIONAL TERM LOANS



 The par-plus share of loans edged up to 7% in March, a gain of 5 percentage points from a month earlier.



## **U.S.** OIL & GAS BID LEVELS

#### **U.S. OIL & GAS BID LEVELS**

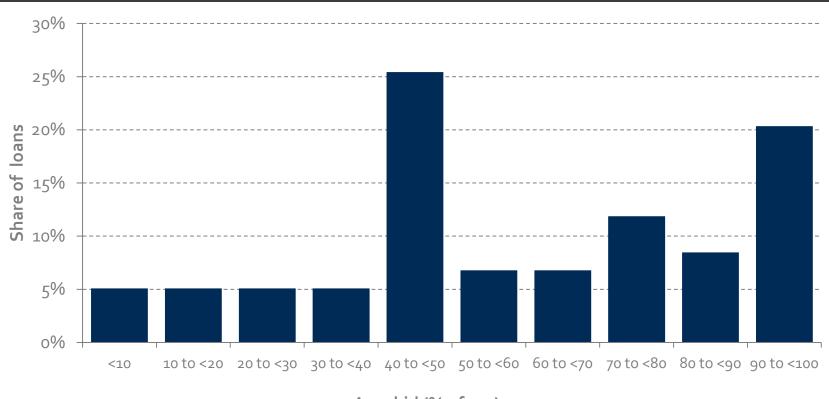


 Oil & gas loan bids recovered a small piece of lost ground, ending March in the 59 area, a gain of 5 points from the February low.



## DISTRIBUTION OF OIL & GAS SECONDARY MARKET BIDS





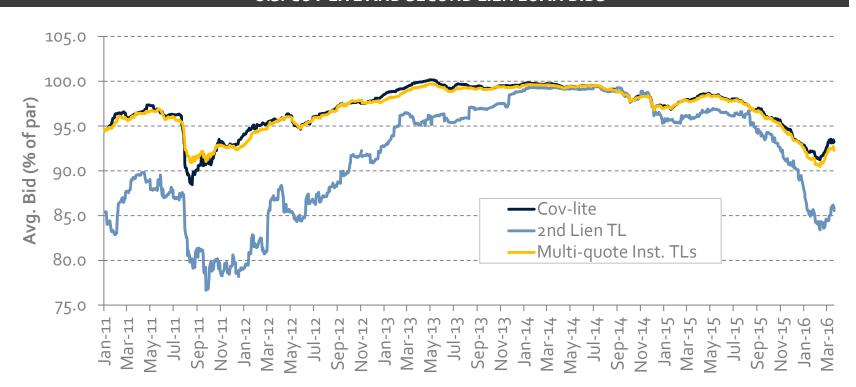
Avg. bid (% of par)

• Nearly half (46%) of oil & gas loans are now bid below 50, while 20% are priced in the 90-plus area.



# SECONDARY MARKET BID LEVELS: COVENANT-LITE & SECOND-LIENS

#### U.S. COV-LITE AND SECOND LIEN LOAN BIDS

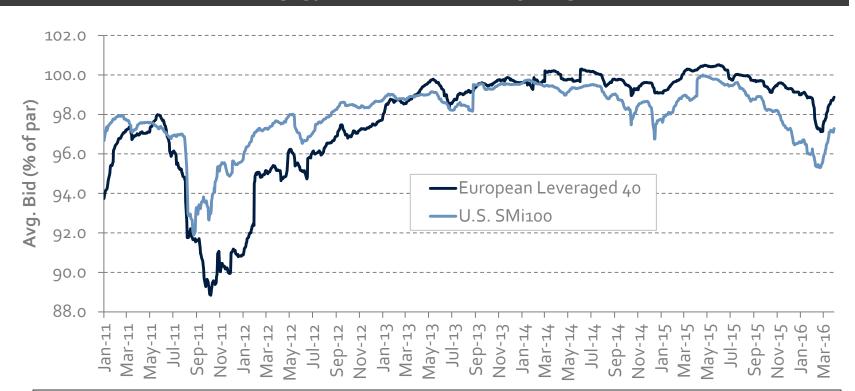


- Second-lien bids increased by 136 bps to 85.55 in March, but are still down 340 bps this year.
- The average bid on covenant-lite loans was up 160 bps in March to 93.25.



## **SECONDARY MARKET BID LEVELS: EUROPE**

#### SECONDARY MARKET AVERAGE BIDS



- Both European and US flow loans rebounded by roughly 175 bps in March.
- European flow names now average 98.87, while US credits are at 97.28.



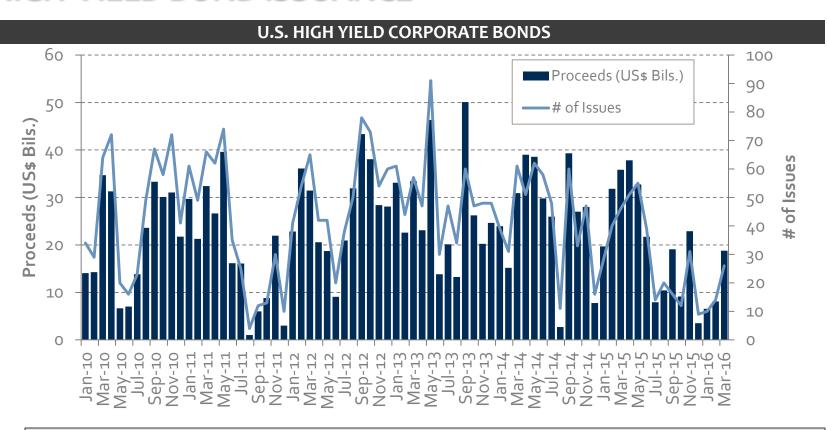


REUTERS/Petar Kujundzic

## U.S. HIGH YIELD BOND MARKET OVERVIEW



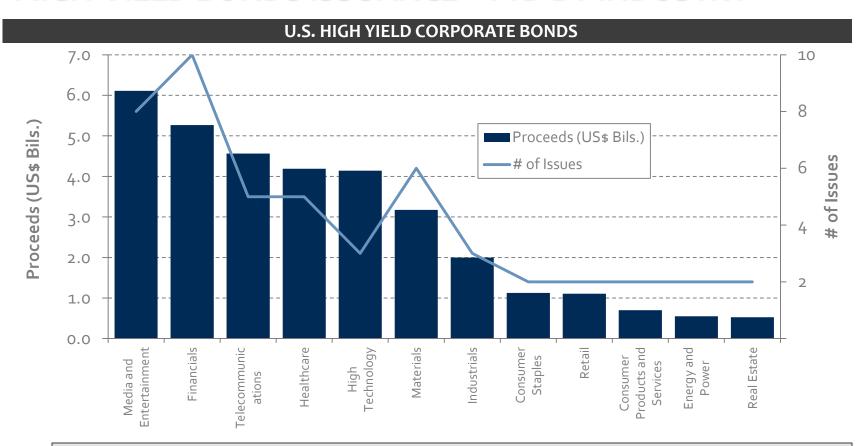
## **HIGH YIELD BOND ISSUANCE**



 High-yield bond issuance increased to \$18.8 billion in March, but 1Q16 volume at \$33.5 billion is still down 62% from the corresponding quarter last year.



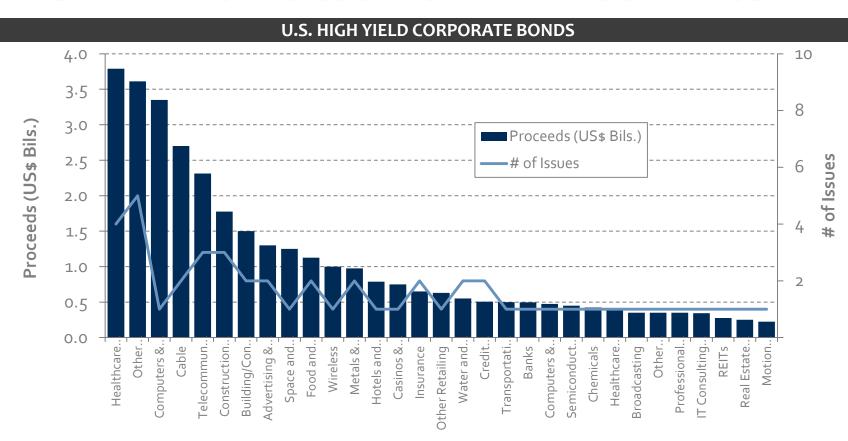
## HIGH YIELD BONDS ISSUANCE - YTD BY INDUSTRY



- By industry, Media & Entertainment companies led the way in the first quarter, accounting for 18% (\$6.1 billion) of high yield issuance.
- Financials and Telecom were next at \$5.3 billion and \$4.6 billion, respectively.



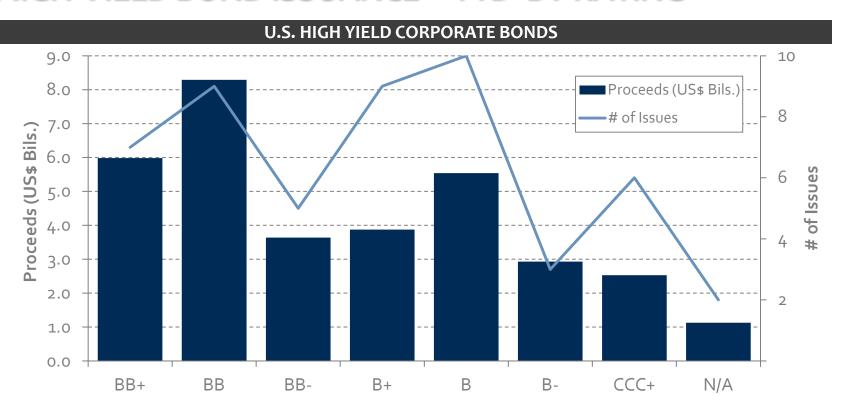
## HIGH YIELD BONDS ISSUANCE - YTD BY SUB-INDUSTRY



- At the subsector level, Healthcare Providers & Services were the largest issuers in 1Q16, with \$3.8 billion of issuance.
- Next was Other Financials (\$3.6 billion), Computers & Peripherals (\$3.4 billion), and Cable (\$2.7 billion).



## HIGH YIELD BOND ISSUANCE - YTD BY RATING

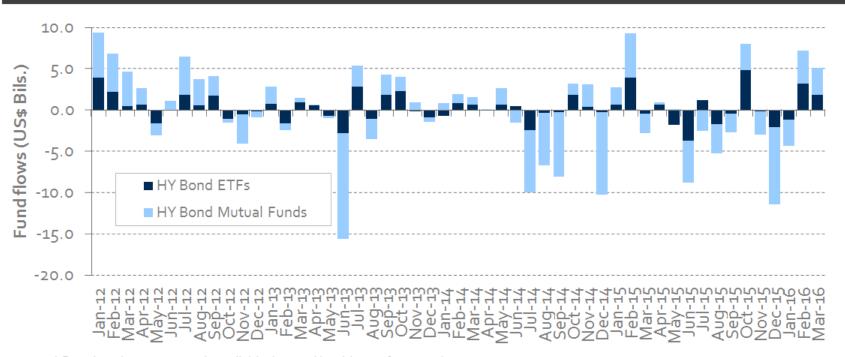


• Over half (53%) of high-yield bonds issued so far this year are rated BB-or higher.



# HY BOND FUND FLOWS – MUTUAL FUND VS. ETF BREAKOUT\*

#### **HY BOND FUND FLOWS**

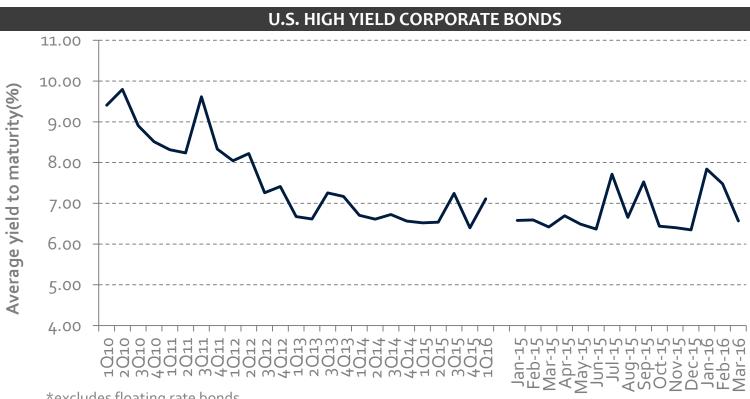


 $\star$  Based on the most recently available data and is subject to future updates.

- Based on the most recent data available, HY bond funds posted a second straight month of strong inflows, adding \$5.1 billion in March following an inflow of \$7.2 billion in February. Year to date, HY bond funds have pulled in \$7.9 billion.
- By fund type, mutual funds recorded an inflow of \$4 billion in 1Q16, while ETFs added \$3.8 billion.



## HIGH YIELD BONDS - NEW ISSUE YIELDS\*



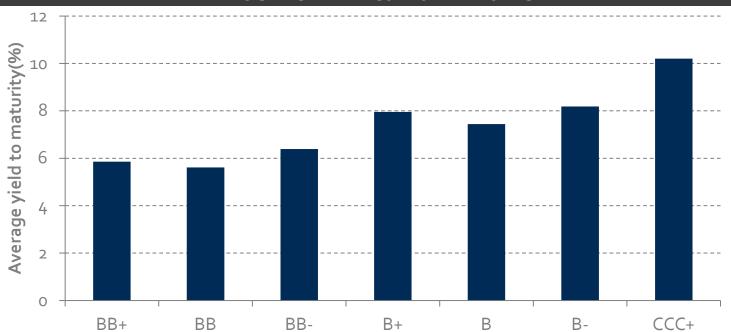
\*excludes floating rate bonds

- New issue yields tightened in March to 6.57% from 7.48% in February.
- For the quarter overall, new issue yields averaged 7.11%, up from 6.40% in 4Q15.



# HIGH YIELD BONDS: YTD NEW ISSUE YIELDS\* BY RATING





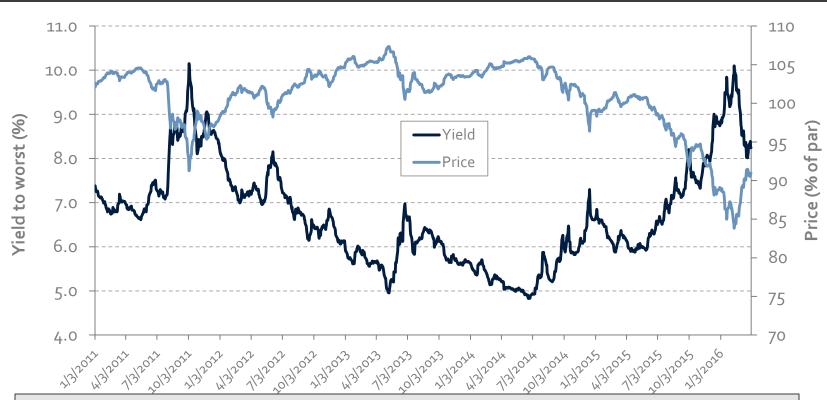
\*excludes floating rate bonds

• Year to date average new issue yields range from 5.61% for BB rated issues to 10.2% for bonds rated CCC+.



## **HIGH YIELD BOND INDEX**

#### U.S. HIGH YIELD BOND INDEX



 Secondary market bond yields tightened another 78 bps in March to 8.24%, and are now 185 bps tighter than at their February high.





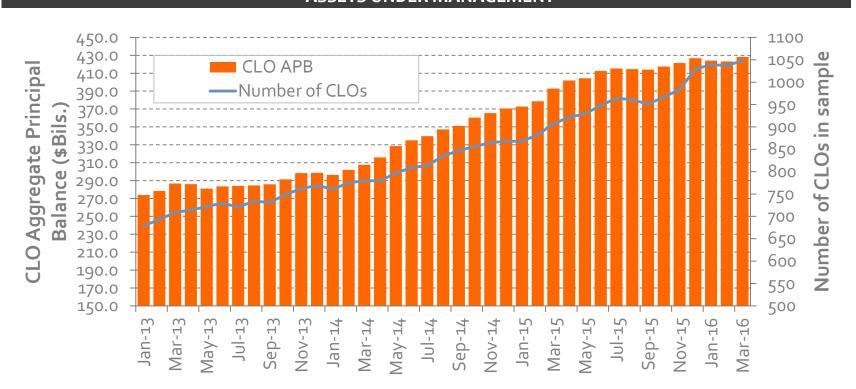
REUTERS/Petar Kujundzic

## **INVESTOR OVERVIEW**



## **U.S. CLO** ASSETS UNDER MANAGEMENT

#### **ASSETS UNDER MANAGEMENT**

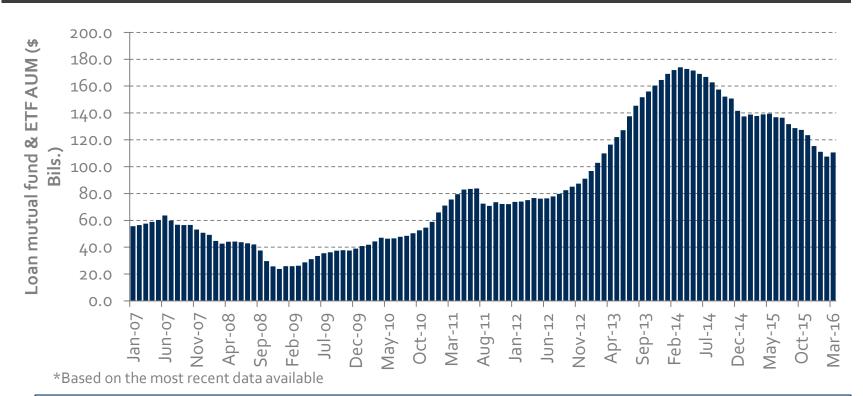


U.S. CLO assets under management increased to \$428 billion in March.



## **LOAN FUNDS AUM**

#### U.S. LOAN MUTUAL FUND & ETF ASSETS UNDER MANAGEMENT\*

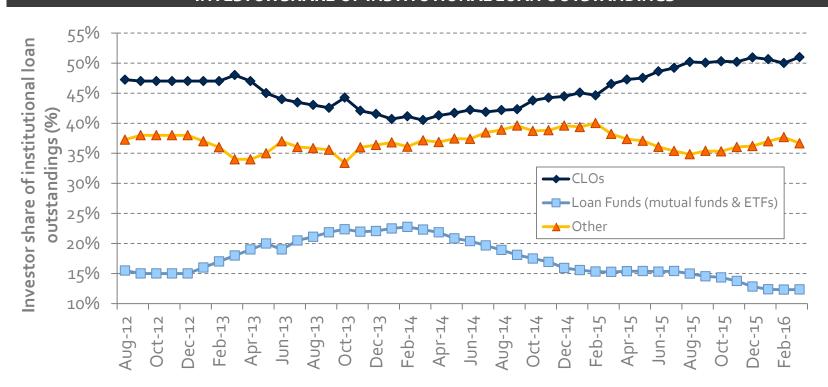


- Loan mutual fund & ETF assets under management increased for the first time since May 2015, growing 3% in March and ending the month around \$110.7 billion.
- The increase in AUM was mainly driven by an increase in asset values as secondary market loan prices rebounded in March.



## INVESTOR SHARE OF INSTITUTIONAL LOAN OUTSTANDINGS

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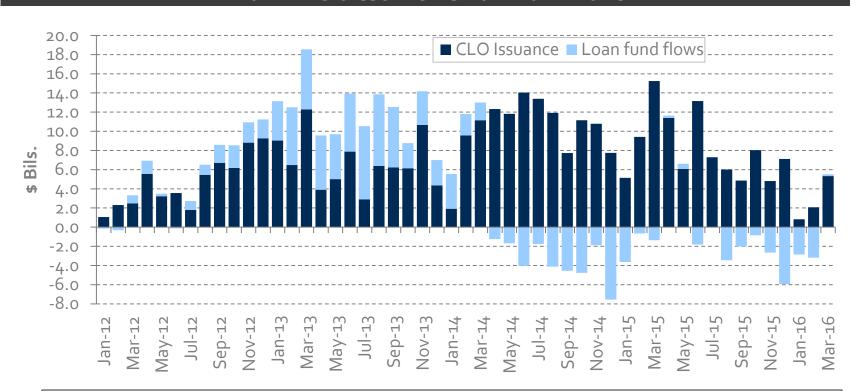


- The CLO share of institutional loan outstandings is just over 50%.
- Loan mutual funds & ETF market share is down to 12% on the back of outflows in the last two years.



## **CLO ISSUANCE VS. LOAN FUND FLOWS - MONTHLY**

#### MONTHLY CLO ISSUANCE VS. LOAN FUND FLOWS



- U.S. CLO issuance increased in March to \$5.3 billion (13 deals), up from \$2.1 billion in February and \$826 million in January. This brought 1Q16 issuance to \$8.2 billion (20 deals), down sharply from \$29.8 billion (55 deals) in the same period last year.
- Based on the most recent data available, loan funds turned marginally positive in March, pulling in \$169 million. Still, \$5.9 billion has exited year to date.





REUTERS/Petar Kujundzic

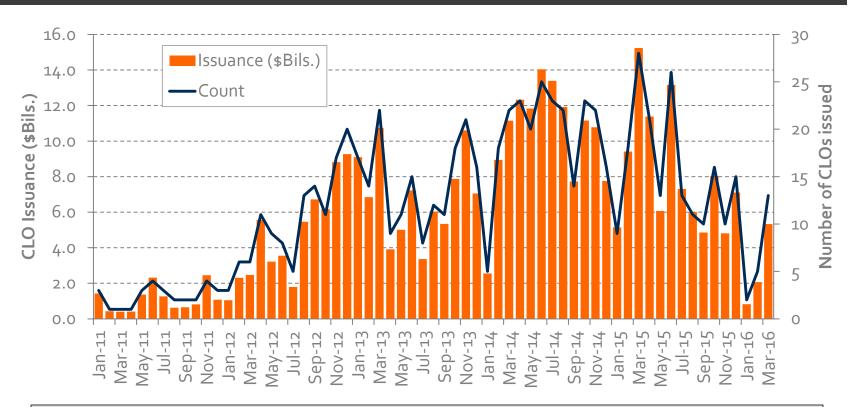
## **CLO MARKET ANALYSIS\***

\*Based on the most recently available data in Thomson Reuters LPC Collateral



## **U.S. CLO ISSUANCE - MONTHLY**

#### **CLO ISSUANCE**

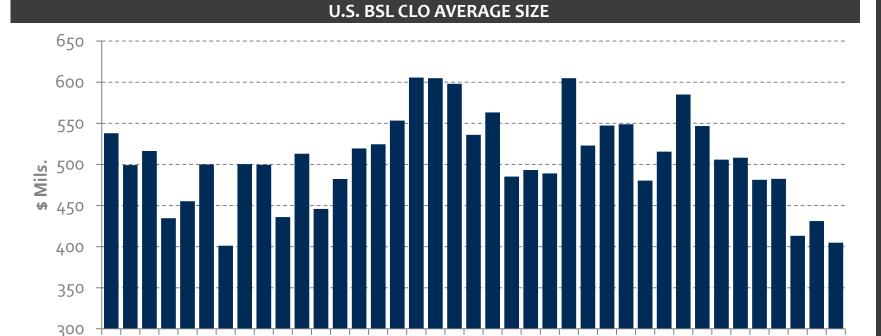


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## **U.S. CLO AVERAGE SIZE**

Aug-13



• The average size of the twelve BSL CLOs issued in March fell to \$405 million, with deals ranging from \$252 million to \$512 million.

Jun-14 Jul-14

Apr-14 May-14

Mar-14

Oct-14 Nov-14 Dec-14

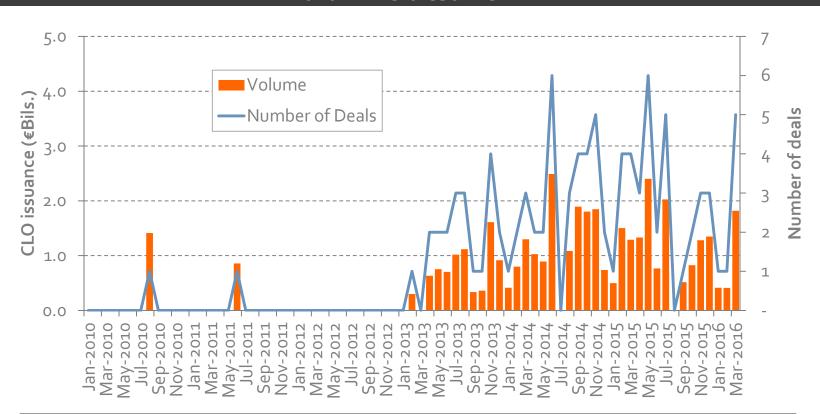
Aug-14 Sep-14

• Year to date, the average deal size is \$412 million. For full year 2015 it was \$527 million.



### **EUROPEAN CLO ISSUANCE - MONTHLY**

#### **EUROPEAN CLO ISSUANCE**

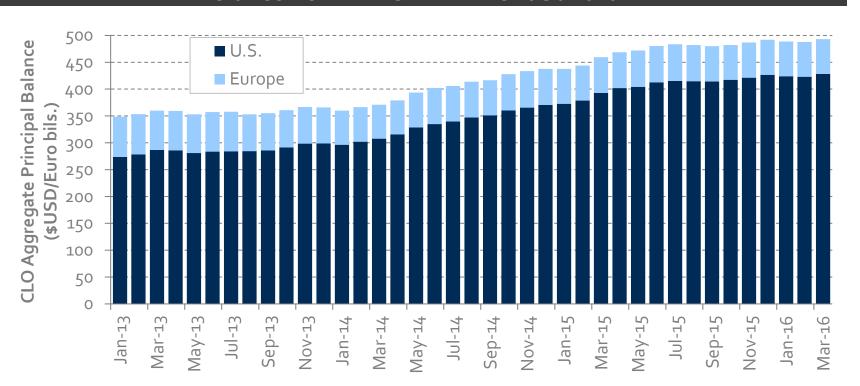


- European CLO issuance picked up in March, with five deals pricing for a total of €1.82 billion.
- Overall 1Q16 issuance was €2.64 billion, down from €3.3 billion in the same quarter last year.



### **CLO** ASSETS UNDER MANAGEMENT

#### **CLO AGGREGATE PRINCIPAL BALANCE: U.S & EUROPE**

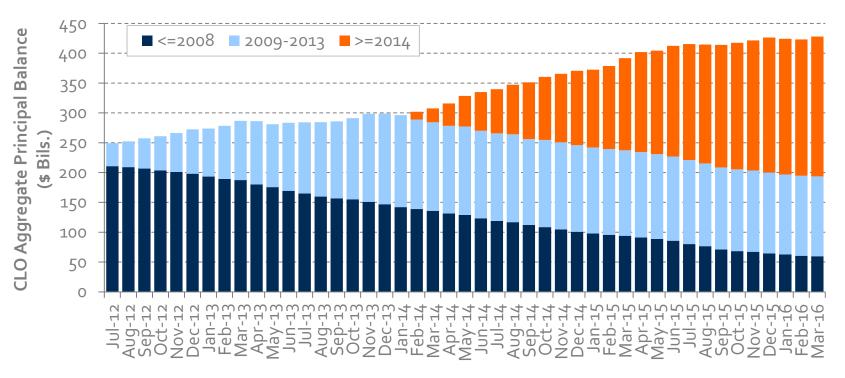


• U.S. CLOs AUM increased to \$428 billion in March, while European CLOs AUM edged higher to €65 billion.



## **U.S. CLO AUM BY VINTAGE\***

#### U.S. CLO AGGREGATE PRINCIPAL BALANCE BY VINTAGE



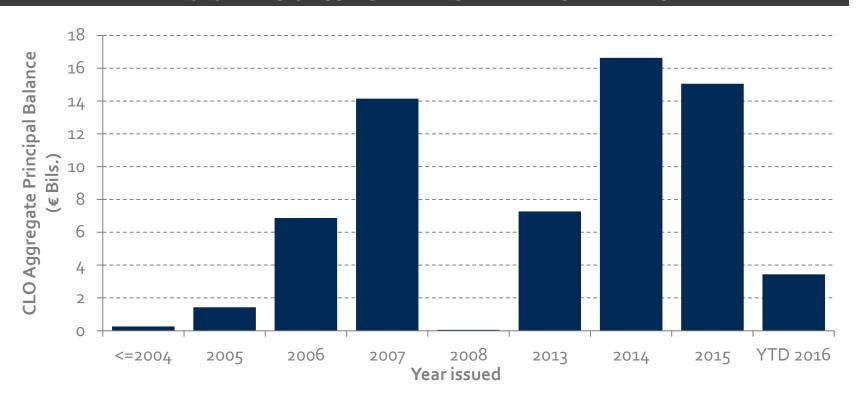
\*Based on year issued

- CLOs issued since the beginning of 2014 now account for 55% of U.S. CLO assets under management.
- The CLO 1.0 share of the market is down to 14%.



## **EUROPEAN CLO AUM BY VINTAGE**

#### EUROPEAN CLO AGGREGATE PRINCIPAL BALANCE BY VINTAGE



 European CLO 2.0s share of assets under management has climbed to over €42 billion or 65% of the market.



### TOP LOAN HOLDINGS IN U.S. CLO PORTFOLIOS

Rank	Issuer	Approx. Amount (\$Bils.)*
1	Valeant Pharmaceuticals	3.76
2	First Data Corp	3.37
3	Asurion Corp	3.09
4	Albertson	2.92
5	Avago Technologies	2.74
6	Community Health	2.71
7	Numericable SAS	2.56
8	Calpine Corp	2.30
9	Charter Communications	2.03
10	Cablevision Systems Corp	1.93
11	Scientific Games	1.91
12	Chrysler Corp	1.91
13	Univision Communications	1.88
14	Fortescue Metals Group Ltd	1.82
15	Transdigm	1.80
16	Dell Computer Corp	1.76
17	Ineos Group Ltd	1.70
18	Royalty Pharma	1.67
19	TXU Corp	1.63
20	Berry Plastics Corp	1.59

Rank	Issuer	Approx. Amount (\$Bils.)*
21	Petsmart Inc	1.56
22	HCA Inc.	1.55
23	Formula One Group	1.51
24	American Airlines	1.51
25	NXP BV	1.47
26	Level 3 Communications	1.41
27	Sabre Holdings Corp	1.39
28	Infor Global Solutions	1.35
29	Aramark Corporation	1.30
30	Federal-Mogul Corp	1.26
31	WME IMG Holdings LLC	1.25
32	Hertz Corp.	1.24
33	Avaya Inc	1.23
	Advantage Sales & Marketing	
34	(Karman Buyer Corp.)	1.22
35	BMC Software	1.21
36	MacDermid Inc	1.20
37	Travelport Inc	1.19
	Communications Sales & Leasing	
38	Inc	1.17
39	Tribune Co	1.17
40	West Corp	1.16

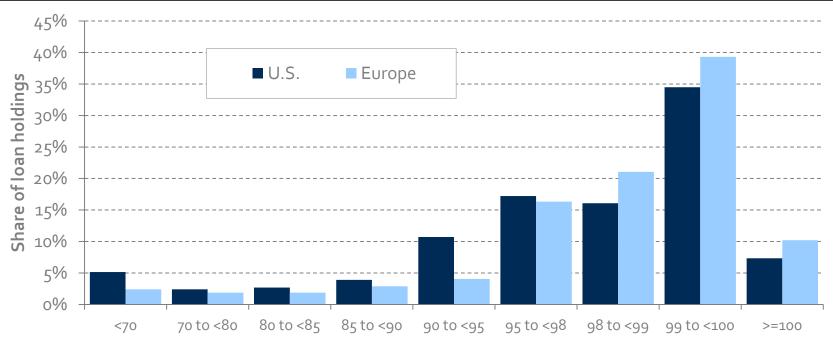
### TOP LOAN HOLDINGS IN EUROPEAN CLO PORTFOLIOS

Rank	Issuer	Approx. Amount (❸ils.)*
	Numericable SAS	1.262
	ZIGGO BV	1.098
	eircom Group Plc	1.040
4	Ineos Group Ltd	0.995
5	Telenet Operatives NV	0.859
6	Ista International GmbH	0.797
7	IDCSalud Quiron	0.791
8	First Data Corp	0.682
9	Flint Group	0.655
	Springer Science &	
10	Business Media GmbH	0.626
11	Dell Computer Corp	0.570
12	Parques Reunidos SA	0.553
13	Wind Telecomunicazione Spa	0.525
	BSN Medical GmbH & Co	
14	KG	0.481
15	IMS Healthcare	0.450
16	SIG Combibloc Group AG	0.436
17	Jacobs Douwe Egberts	0.422
18	Ahlsell AB	0.406
	Avago Technologies	
19	Finance Pte Ltd	0.387
20	Verallia SA	0.387

Rank	Issuer	Approx. Amount (❸ils.)*
	ConvaTec Ltd	0.387
22	Gala Coral Group Ltd	0.385
	Nets Holding A/S	0.377
24	Douglas Holding AG	0.369
25	lglo Foods Group Ltd	0.349
26	CBR Holding GmbH & Co	0.345
27	Patheon Inc	0.342
28	Delachaux SA	0.301
29	Scout24	0.299
30	Cortefiel SA	0.298
	Diaverum AB [Ex-Gambro	
31	Healthcare]	0.294
32	Infor Global Solutions	0.292
	OGF(Pompes Funebres	
33	Generale)	0.291
34	Aenova Holding GmbH	0.288
35	Foncia SA	0.281
36	Unit 4 Agresso NV	0.280
37	GARDNER DENVER INC	0.280
38	Ceva Sante Animale SA	0.277
39	BMC Software	0.273
40	Mauser AG	0.271

# DISTRIBUTION OF SECONDARY MARKET PRICES OF LOAN ASSETS IN CLOS





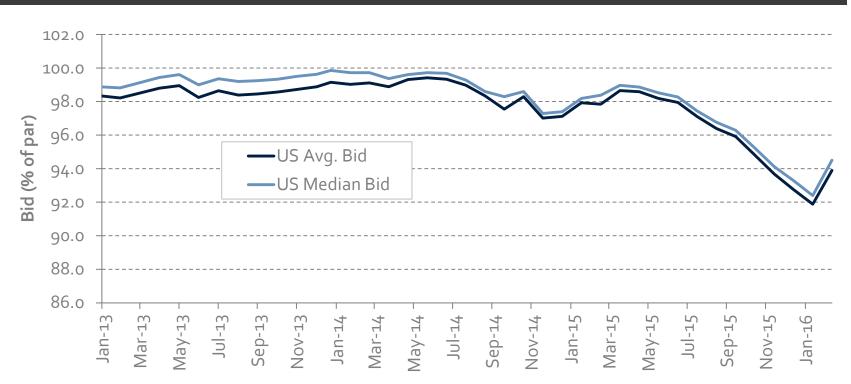
- Avg. bid (% of par)
- As secondary market prices have rebounded in recent weeks, the share of loan assets in U.S. CLOs bid above 98 has increased to 58% for US CLOs and 71% for European CLOs.
- The share of sub-90 credits has declined to 14% for U.S. deals. The corresponding number for loans in European CLOs is 9%.



## AVERAGE BID OF U.S. CLO PORTFOLIOS

(UNDERLYING ASSETS)

#### **AVERAGE BID OF U.S. CLO PORTFOLIOS**



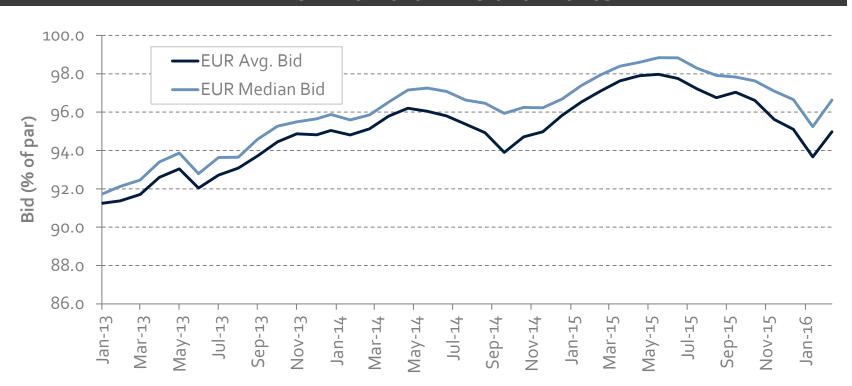
- The average bid of U.S. CLO portfolios increased to 93.89 in March.
- The median bid jumped to 94.50 from 92.40 a month ago.



## **AVERAGE BID OF EUROPEAN CLO PORTFOLIOS**

(UNDERLYING ASSETS)

#### **AVERAGE BID OF EUROPEAN CLO PORTFOLIOS**



- The average bid of European CLOs asset portfolios moved higher to 94.97 in March.
- The median bid increased to 96.63 from 95.24 a month earlier.



# WEIGHTED AVERAGE BID OF CLO PORTFOLIOS: U.S. VS. EUROPE





\*Excludes CLOs less than \$50 million in size.

- Roughly two thirds of US CLO portfolios have a weighted average bid on their assets in the 93 to 97 category, while a similar share of European CLOs are in the 95 to 99 range.
- At the lower end, 6% of U.S. CLOs and 11% of European CLOs now have a weighted average bid in the sub-90 range.





REUTERS/Petar Kujundzic

## LIST OF RECENT CLOs/LEAGUE TABLES



## 1Q 2016 U.S. CLOS

Date				Deal	AAA	Equity
priced CLO name	CLO manager	Agent bank	Trustee	size	size	size
01/22/16Babson CLO 2016-1	Babson Capital	Morgan Stanley	Citi/Virtus	407.00	250.50	36.50
01/22/16Voya CLO 2016-1	Voya Investment Management	JP Morgan	US Bank	419.30	257.30	37.75
02/02/16Golub Capital CLO 2016-30	Golub	GreensLedge	US Bank	478.00		95.50
Newstar Commercial Loan Funding						
02/12/162016-1	NewStar Financial	Wells Fargo	US Bank	348.01	196.50	45.51
02/24/16Neuberger Berman CLO XXI	Neuberger Berman	Morgan Stanley	US Bank	361.50	226.20	30.90
	BlackRock Financial		Deutsche			
02/25/16Magnetite XVII	Management	Deutsche Bank	Bank	498.75	320.00	38.75
02/25/16Madison Park Funding XX	Credit Suisse Asset Management	JP Morgan	Wells Fargo	504.90	310.00	44.90
02/25/16 Denali Capital CLO XII	Denali Capital	BNP Paribas	US Bank	358.84	222.25	36.86
03/04/16 Highbridge Loan Management 8-2016	Highbridge Principal Strategies	Morgan Stanley	US Bank	406.75	251.00	37.75
03/09/16Oaktree EIF I Series A	Oaktree Capital Management	Wells Fargo	Bony/Mellon	470.00	289.80	88.10
	American Capital Asset					
03/15/16ACAS CLO 2016-9	Management	Citi	US Bank	405.48	268.00	36.48
03/16/16Wellfleet CLO 2016-1	Wellfleet Credit Partners	Morgan Stanley	US Bank	358.50	229.50	34.50
03/17/16Carlyle GMS CLO 2016-1	Carlyle Investment Management	JP Morgan	State Street	402.90	246.40	34.90
03/18/16Symphony CLO XVII	Symphony Asset Management	GreensLedge	Bony/Mellon	512.00	320.75	52.00
			Deutsche			
03/21/16LCM XXI	LCM Asset Management	Deutsche Bank	Bank	381.06	235.00	36.36
03/23/16Upland CLO	Invesco	Citi	US Bank	406.25	260.00	38.25
03/23/16Mill Creek CLO II	CreekSource	Goldman Sachs	Wells Fargo	302.50	196.50	34.60
03/24/16Telos CLO 2016-7	Telos Asset Management	Societe Generale	US Bank	252.37	156.50	27.37
		Bank of America Merrill				
03/24/16Octagon Investment Partners 26	Octagon Credit Investors	Lynch	US Bank	509.10	310.00	49.10
03/31/16Canyon CLO 2016-1	Canyon Capital	Goldman Sachs		451.00	292.50	39.25



## 1Q 2016 U.S. CLO - PRICING

Date		AAA	AAA	AA		А		BBB		ВВ	BB	В	В
priced	CLO name	coupon	DM	coupon	AA DM	coupon	A DM	coupon	BBB DM	coupon	DM	coupon	DM
01/22/16	Babson CLO 2016-1	150	150	225	225	325	325	385	475	655	890		
01/22/16	Voya CLO 2016-1	150		220		295		420		655			
02/02/16	Golub Capital CLO 2016-30					233		425					
02/12/16	Newstar Commercial Loan Funding 2016-1	230	230	375	375	540	540						
02/24/16	Neuberger Berman CLO XXI	155		240		330		495		700			
02/25/16	Magnetite XVII	155	155	235	235	345	345	515	575	815	950		
02/25/16	Madison Park Funding XX	155		235		330		445		740			
02/25/16	Denali Capital CLO XII	175		245		345		465		775			
03/04/16	Highbridge Loan Management 8-2016	155	155	240	240	375	375	485	624	790	975		
03/09/16	Oaktree EIF I Series A	158	158	250	250	400							
03/15/16	ACAS CLO 2016-9	158		340		360		535		855		855	
03/16/16	Wellfleet CLO 2016-1	175		265		365		557	,	858			
03/17/16	Carlyle GMS CLO 2016-1	158		235		330		490		760			
03/18/16	Symphony CLO XVII	150		225		335		480		740			
03/21/16	LCM XXI	155	155	240	240	350	350	510	570	765	910		
03/23/16	Upland CLO	160	160	240	240	345	350	435	600	825	990		
03/23/16	Mill Creek CLO II	175	175	250	257	335	365	485	570	775	960		
03/24/16	Telos CLO 2016-7	165		270		325		500		750			
03/24/16	Octagon Investment Partners 26	158	158	250	250	335	350	495	570	785	935		
03/31/16	Canyon CLO 2016-1	160	160	243	243	355	360	545/485	590/570	750	960		



## 1Q 2016 U.S. CLO REFINANCINGS

CLO manager	CLO name	Date priced	Amount (\$Mils.)	AAA coupon	AAA DM	AA coupon	AA DM	A coupon	A DM		BBB DM	BB coupon			Non-call period
Apollo Credit Management	ALM 2013-8	8-Mar-16	120.00	219	155										
American Money Management Corp	AMMC CLO IX	31-Mar-16	430.00	158	158	250	250	360	360	565	575	765	940	15-Jan- 18	15-Apr- 17



## 1Q 2016 EUROPEAN CLOS

			Deal Size		Li	abili	ty Sp	read	(bps	5)
Date Priced	CLO Name	CLO Manager	( <del>€</del> m)	Agent Bank	AAA	AA	Α	BBB	ВВ	В
1/15/16	Arbour CLO III	Oaktree Capital Management	414.35	Citi	150	220	305	420	644	856
2/9/16	Blackrock European CLO I	BlackRock Investment Management	410.24	Credit Suisse	150					
3/17/16	CVC Cordatus Loan Fund VI	CVC Credit Partners	411.00	Credit Suisse	150	215	350	515		
3/22/16	BlueMountain Euro CLO 2015-1	BlueMountain Fuji Management	409.80	JP Morgan	170	235	335	515	815	
3/22/16	Contego CLO III	NM Rothschild & Sons	307.80	Deutsche Bank	157	220	335	510	800	
3/24/16	Bosphorus CLO II	Commerzbank	277.70	Stifel	143	215			750	875
3/30/16	Harvest CLO XV	3i Debt Management	413.00	RBC/Resource Capital						



## 1Q16 U.S. CLO ARRANGER LEAGUE TABLE (BY VOLUME)

Rank	Bank Holding Company	Arranger Volume	# of Deals	Market Share
1	Morgan Stanley	1,533.75	4	18.6%
2	JP Morgan	1,327.10	3	16.1%
3	GreensLedge Capital	990.00	2	12.0%
4	Deutsche Bank	879.81	2	10.7%
5	Wells Fargo	818.01	2	9.9%
6	Citi	811.73	2	9.9%
7	Goldman Sachs	753.50	2	9.2%
8	Bank of America Merrill Lynch	509.10	1	6.2%
9	BNP Paribas	358.84	1	4.4%
10	Societe Generale	252.37	1	3.1%



## 1Q16 U.S. CLO MANAGER LEAGUE TABLE (BY VOLUME)

Rank	CLO Manager	CLO Volume	# of Deals	Market Share
1	Symphony Asset Management	512.00	1	6.2%
2	Octagon Credit Investors	509.10	1	6.2%
3	Credit Suisse Asset Management	504.90	1	6.1%
4	BlackRock Financial Management	498.75	1	6.1%
5	Golub Capital Partners	478.00	1	5.8%
6	Oaktree Capital Management	470.00	1	5.7%
7	Canyon Capital	451.00	1	5.5%
8	Voya Investment Management	419.30	1	5.1%
9	Babson Capital	407.00	1	4.9%
10	Highbridge Principal Strategies	406.75	1	4.9%
11	Invesco	406.25	1	4.9%
12	American Capital Asset Management	405.48	1	4.9%
13	Carlyle Investment Management	402.90	1	4.9%
14	LCM Asset Management	381.06	1	4.6%
15	Neuberger Berman	361.50	1	4.4%
16	Denali Capital	358.84	1	4.4%
17	Wellfleet Credit Partners	358.50	1	4.4%
18	NewStar Financial	348.01	1	4.2%
19	Creek Source LLC	302.50	1	3.7%
20	Telos Asset Management	252.37	1	3.1%



## 1Q16 U.S. CLO TRUSTEE LEAGUE TABLE (BY VOLUME)

Rank	Trustee	Trustee Volume	# of Deals	Market Share
1	US Bank	4,755.09	12	57.7%
2	Bank of New York	982.00	2	11.9%
3	Deutsche Bank	879.81	2	10.7%
4	Wells Fargo	807.40	2	9.8%
5	Citi/Virtus	407.00	1	4.9%
6	State Street	402.90	1	4.9%





REUTERS/Petar Kujundzic

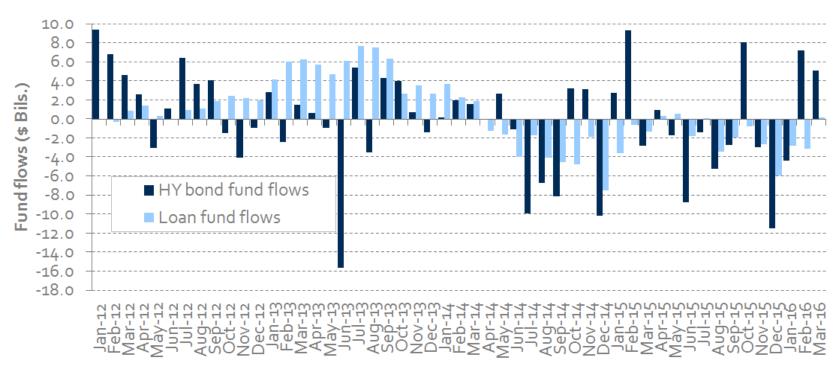
## **LOAN MUTUAL FUND FLOWS & RETURNS**



## LOAN VS. HY BOND FUND FLOWS\*

### - MONTHLY

#### MONTHLY LOAN VS. HY BOND FUND FLOWS

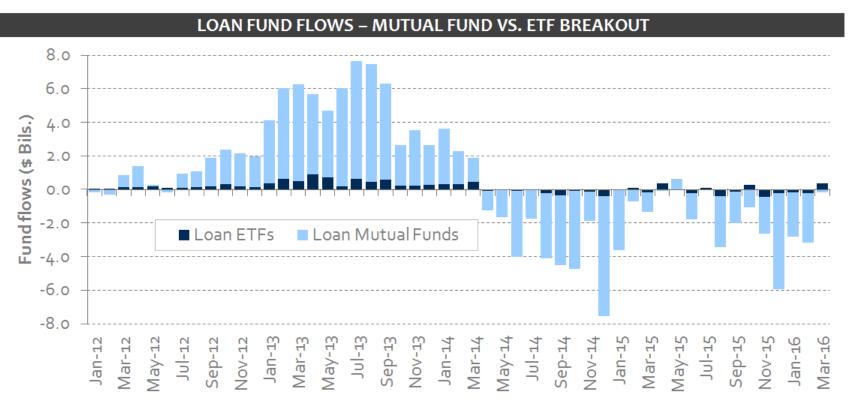


\* Based on the most recently available data and is subject to future updates.

- Based on the most recent data available, loan funds turned marginally positive in March, pulling in \$169 million. Still, year to date outflows are at \$5.9 billion.
- HY bond funds posted a second straight month of strong inflows, adding \$5.1 billion in March following an inflow of \$7.2 billion in February. Year to date, HY bond funds have pulled in \$7.9 billion.



## LOAN FUND FLOWS - MUTUAL FUND VS. ETF BREAKOUT\*



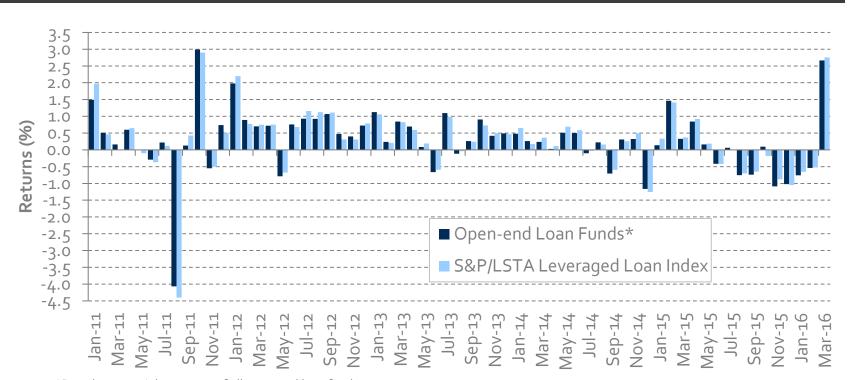
 $<sup>\</sup>boldsymbol{*}$  Based on the most recently available data and is subject to future updates.

 Breaking out loan fund flows into the mutual fund and ETF categories, ETFs added \$341 million in March, while \$172 million exited the much larger mutual fund category.



## LOAN FUNDS VS. LOAN INDEX – MONTHLY RETURNS

#### **MONTHLY FUND VS. INDEX RETURNS**



\*Based on a straight average of all open-end loan fund returns.

- Open-end loan funds bounced back in March, returning 2.67%, while the S&P/LSTA index was up 2.76%.
- Year to date, open-end loan funds have gained 1.34%, with the index up 1.55%.
- Individual open-end fund YTD returns range from -2.50% to 2.75%.

